



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,973	02/22/2007	Keiji Sakamoto	P29617	9933
7055	7590	10/05/2010	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				HENRY, MICHAEL C
ART UNIT		PAPER NUMBER		
1623				
			NOTIFICATION DATE	
			DELIVERY MODE	
			10/05/2010	
			ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

## **DETAILED ACTION**

The amendment filed 07/13/10 affects the application, 10/573,973 as follows:

1. Claims 1, 3, 5, 6 have been amended. Claim 8 has been canceled. The rejections made under 35 U.S.C. 112, second paragraph and under 35 U.S.C. 102 and 103(a) of the prior office action mailed 10/16/09 are maintained as set forth herein below. Also, a new ground(s) rejection is set forth herein below.

2. The responsive to applicants' arguments is contained herein below.

Claims 1-3, 5-7, 9 and 10 are pending in application

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the phrase “a protective group selected from a hydroxyl group, a phosphate group, or a protected phosphate group”. However, the claim is indefinite since it is unclear how a hydroxyl group can be a protected group. Also, it is unclear what the difference between a protective group selected from a phosphate group and a protected phosphate group. That is unclear what constitutes a protective group selected from a phosphate group as compared to a protected phosphate group as recited in the claim.

Claim 7 recites the phrase “wherein the stability of the vitamin is improved”. However, the claim is indefinite since it is unclear how said vitamin is stabilized or what it is stabilized from or what constitutes a stabilization or an improved stability.

***Claim Rejections - 35 USC § 102***

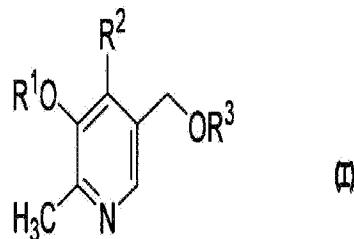
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Mineura et al. (Nippon Nogei Kagaku Kaishi (1972), 46(3), 111-18, Abstract Only).

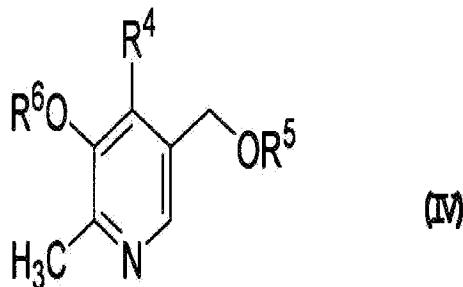
Claim 1 is drawn to a compound represented by the following general formula (I) or a salt thereof:



wherein R<sup>1</sup> represents a phosphate or a cyclic phosphate group bound to R<sup>2</sup>; R<sup>2</sup> represents -CH<sub>2</sub>OH, -CHO, -CH<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>-amino acid residue, or -CH<sub>2</sub>-OPO<sub>2</sub>H; and R<sup>3</sup> represents hydrogen atom, or -PO<sub>3</sub>H<sub>2</sub>. Mineura et al. disclose applicant's compound represented by the general formula (I) wherein R<sup>1</sup> represents a cyclic phosphate group bound to R<sup>2</sup>; R<sup>2</sup> represents -CH<sub>2</sub>OH; and R<sup>3</sup> represents hydrogen atom (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be noted that applicant's compound is also named 4H-1,

3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract).  
Claim 2 is drawn to the compound or a salt thereof according to claim 1, which is selected from the group consisting of pyridoxine 3-phosphate, pyridoxine 3,4'cyclic phosphate, and N-(4 pyridoxylmethylene)-L-serine 3-phosphate, or a salt thereof. Mineura et al. disclose applicant's compound, pyridoxine 3,4'cyclic phosphate (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be noted that applicant's compound is also named 4H-1, 3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract).

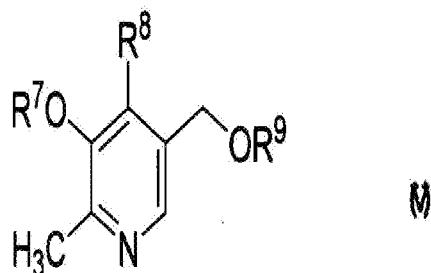
Claim 3 is drawn to a compound represented by the following general formula (IV) or a salt thereof:



wherein R<sup>4</sup> represents -CH<sub>2</sub>OH, -CHO, or -CH<sub>2</sub>NH<sub>2</sub>, or represents -CH<sub>2</sub>OH, -CHO, or -CH<sub>2</sub>NH<sub>2</sub> protected with a protective group; R<sup>5</sup> represents hydrogen atom, a protective group of hydroxyl group, a phosphate group, or a protected phosphate group; and R<sup>6</sup> represents a cyclic phosphate group bound to R<sup>4</sup> which may have a protective group. Mineura et al. disclose applicant's compound represented by the general formula (IV) wherein R<sup>6</sup> represents a cyclic phosphate group bound to R<sup>4</sup>; R<sup>4</sup> represents -CH<sub>2</sub>OH; and R<sup>5</sup> represents hydrogen atom (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be

noted that applicant's compound is also named 4H-1, 3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract).

In claim 5, applicant claims a composition for a cosmetic, a medicament, a foodstuff, and/or a feed comprising a compound represented by the following general formula (V) or a salt thereof:



wherein R<sup>7</sup> represents a phosphate group, a sulfate, or a cyclic phosphate group bound to R<sup>8</sup>; R<sup>8</sup> represents -CH<sub>2</sub>OH, -CHO, -CH<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>-amino acid residue, or -CH<sub>2</sub>-OPO<sub>2</sub>H; and R<sub>9</sub> represents hydrogen atom, or -PO<sub>3</sub>H<sub>2</sub>. Mineura et al. disclose applicant's composition or compound represented by the general formula (V) wherein R<sup>7</sup> represents a cyclic phosphate group bound to R<sup>8</sup>; R<sup>8</sup> represents -CH<sub>2</sub>OH; and R<sup>9</sup> represents hydrogen atom (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be noted that applicant's compound is also named 4H-1, 3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract). It should be noted that it is well settled that "intended use" of a composition or product, e.g., for a cosmetic or a medicament, does not further limit claims drawn to a composition or product. See, e.g., *Ex parte Marsham*, 2 USPQ2d 1647 (1987) and *In re Hack* 114, USPQ 161.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mineura et al. (Nippon Nogei Kagaku Kaishi (1972), 46(3), 111-18, Abstract Only).

In claim 7, applicant claims a composition for a cosmetic, a medicament, foodstuff, and/or a feed containing a compound represented by the general formula (V) or a salt thereof mentioned in claim 5 and at least one kind of vitamin, wherein stability of the vitamin is improved.

Mineura et al. disclose applicant's composition or compound represented by the general formula (V) wherein R<sup>7</sup> represents a cyclic phosphate group bound to R<sup>8</sup>; R<sup>8</sup> represents -CH<sub>2</sub>OH; and R<sup>9</sup> represents hydrogen atom (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be noted that applicant's compound is also named 4H-1, 3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract). Also, it is known in the art that Mineura et al.'s compound can be utilized as vitamin B6 (pyridoxine).

The difference between applicants claimed composition and the composition of Mineura et al. is that applicant's composition also contains another vitamin.

It would have been obvious to one having ordinary skill in the art, at the time the claimed invention was made, to prepare a composition comprising a combination of Mineura et al.'s

compound and another vitamin which have the same utility in order to use it in nutritive, food stuff or a medicament.

One having ordinary skill in the art would have been motivated, to prepare a composition comprising a combination of Mineura et al.'s compound and another vitamin which have the same utility in order to use it in a nutritive, a food stuff or a medicament. It should be noted that it is obvious to determine the properties of the prepared composition or the components of the composition such as the stability of the components of the composition.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Savini Emile Constantin (FR 2349330 A) in view of Mineura et al.(Nippon Nogei Kagaku Kaishi (1972), 46(3), 111-18, Abstract Only).

Claim 9 is drawn to a composition comprising (A) a compound represented by the general formula (V) according to claim 5, and (B) one or more kinds of substances selected from the group consisting of a whitening agent, an antioxidant, an antiphlogistic, a circulation accelerator, a cell activation agent, and an ultraviolet absorber, which is used as a whitening agent, an anti-aging agent, and/or an agent for suppressing wrinkle formation by exposure to ultraviolet light. Claim 10 is drawn to a whitening agent containing (A) a compound represented by the general formula (V) mentioned in claim 5, and (B) arbutin.

Savini Emile Constantin discloses that compositions comprising a pyridoxine and an antioxidant which can be used to treat hyperlipidaemia (see abstract).

The difference between applicants claimed composition and the composition of Savini Emile Constantin is the specific pyridoxine compound used.

Mineura et al. disclose a compound represented by the general formula (V) wherein R<sup>7</sup> represents a cyclic phosphate group bound to R<sup>8</sup>; R<sup>8</sup> represents -CH<sub>2</sub>OH; and R<sup>9</sup> represents hydrogen atom (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be noted that applicant's compound is also named 4H-1, 3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract). Also, it is known in the art that Mineura et al.'s compound can be utilized as vitamin B6 (pyridoxine).

It would have been obvious to one having ordinary skill in the art, at the time the claimed invention was made, to prepare a composition comprising a combination of a pyridoxine such as Mineura et al.'s pyridoxine compound and an antioxidant to treat hyperlipidaemia, since Savini Emile Constantin discloses that a pyridoxine and an antioxidant can be used.

One having ordinary skill in the art would have been motivated, to prepare a composition comprising a combination of a pyridoxine such as Mineura et al.'s pyridoxine compound and an antioxidant to treat hyperlipidaemia, since Savini Emile Constantin discloses that a pyridoxine and an antioxidant can be used. It should be noted that claim 10 is also encompassed by this rejection since it is obvious to use an antioxidant such as arbutin, since Savini Emile Constantin disclose that a pyridoxine and an antioxidant can be used. Also, it should be noted that it is well settled that "intended use" of a composition or product, e.g., for a whitening agent, does not further limit claims drawn to a composition or product. See, e.g., *Ex parte Marsham*, 2 USPQ2d 1647 (1987) and *In re Hack* 114, USPQ 161.

***Response to Arguments***

Applicant's arguments with respect to claims 1-3, 5, 7, 9 and 10 have been considered but are not found convincing.

The applicant argues that claim 7 is clear and definite and that one of ordinary skill in the art would immediately know what is meant by the phrase "wherein the stability of the vitamin is improved." Applicants further submit that the phrase "wherein the stability of the vitamin is improved" is also clear and definite in view of the specification. In particular, the specification describes how compounds of the claimed subject matter improve the stability of a vitamin, for example, in Example 16 on page 38. However, Claim 7 recites the phrase "wherein the stability of the vitamin is improved". But, the claim is indefinite since it is unclear how said vitamin is stabilized or what it is stabilized from or what constitutes a stabilization or an improved stability.

The Applicant argues that Mineura discloses the study of conditions for the production of pyridoxal phosphate from pyridoxine 4',5'-cyclic phosphate (emphasis added), not pyridoxine 3,4'-cyclic phosphate or any "compound represented by the following general formula (I) or a salt thereof: wherein R<sup>1</sup> represents a phosphate group or a cyclic phosphate group bound to R<sup>2</sup>; R<sup>2</sup> represents -CH<sub>2</sub>OH, -CHO, -CH<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>-amino acid residue, or -CH<sub>2</sub>-OPO<sub>2</sub>H; and R<sup>3</sup> represents a hydrogen atom, or -PO<sub>3</sub>H<sub>2</sub>." However, Mineura's compound is the same as applicant's claimed compound. That is, Mineura et al. disclose applicant's compound represented by the general formula (I) wherein R<sup>1</sup> represents a cyclic phosphate group bound to R<sup>2</sup>; R<sup>2</sup> represents -CH<sub>2</sub>OH; and R<sup>3</sup> represents hydrogen atom (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be noted that applicant's compound is also named 4H-1, 3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract). Furthermore, it should be noted that structure of applicant's

claimed compound of formula (I) is the same or identical as the structure of the Mineura et al.'s compound, regardless of what applicant claims is being studied by Mineura's (see abstract). That is, Mineura et al. disclose the same compound claimed by applicant.

The Applicant argues that the Abstract of the Mineura document cited in the rejection includes the chemical structure for RN 36944-85-1, a pyridoxine 3,4'-cyclic phosphate. The association of this chemical structure with Mineura's disclosure of "pyridoxine 4',5'-cyclic phosphate" is therefore in obvious error. One of ordinary skill in the art would immediately know that the chemical structure for RN 36944-85-1 is not "pyridoxine 4',5'-cyclic phosphate." Accordingly, Mineura does not disclose a compound which is encompassed by Applicants' claimed subject matter. However, the compound disclosed by Mineura et al. has the chemical structure for RN 36944-85-1, a pyridoxine 3,4'-cyclic phosphate which the same compound of formula (I) claimed by Applicant and is not an error (see abstract). Also, it should be noted that this compound has a Cas # (RN 36944-85-1) and was disclosed and well known or published before applicant instant invention. That is, the Cas# (RN 36944-85-1) identifies the same compound as that claimed by Applicant.

The Applicant argues that Applicants submit herewith a copy of Mineura et al. (Nippon Nogei Kagaku Kaishi 46(3):103-110, 1972), i.e., Part I. of Mineura's "Studies on the Production of Pyridoxal Phosphate." This article is also from the same issue of the same journal cited in the instant rejection. Applicants submit that that the chemical structure of the "pyridoxine 4',5'-cyclic phosphate" disclosed in the Abstract is actually the structure set forth in Figure 1 on page 104 of Part I of Minuera's studies, and not the structure associated with RN 36944-85-1 as set forth incorrectly in the Abstract cited by the Office. However, the reference cited by Applicant is not

the same as the reference cited by the Examiner. The reference cited by the Examiner is Mineura et al. (Nippon Nogei Kagaku Kaishi (1972), 46(3), 111-18) whereas the reference cited by Applicant is (Mineura et al. (Nippon Nogei Kagaku Kaishi 46(3):103-110, 1972), i.e., Part I. of Mineura's "Studies on the Production of Pyridoxal Phosphate" (see references cited).

The Applicant argues that in further support thereof, Applicants submit the chemical structure of RN 14141-47-0, which structure is associated with Part I of Mineura's studies, i.e., Mineura et al. (Nippon Nogei Kagaku Kaishi 46(3): 103-110, 1972). This structure is the same as that set forth in Figure 1 on page 104, and the same as the "pyridoxine 4',5'-cyclic phosphate" disclosed in the Mineura Abstract cited in the rejection. As can be clearly seen, the chemical structure for "pyridoxine 4',5'-cyclic phosphate" is not the same as Applicant's claimed pyridoxine 3,4'-cyclic phosphate and is not encompassed by any of Applicants' claimed compound[s] represented by the following general formula (I) or a salt thereof. However, the reference cited by Applicant is not the same as the reference cited by the Examiner. The reference cited by the Examiner is Mineura et al. (Nippon Nogei Kagaku Kaishi (1972), 46(3), 111-18) whereas the reference cited by Applicant is (Mineura et al. (Nippon Nogei Kagaku Kaishi 46(3):103-110, 1972), i.e., Part I. of Mineura's "Studies on the Production of Pyridoxal Phosphate" (see references cited). Moreover, the compound disclosed by Mineura et al. has the chemical structure for RN 36944-85-1, a pyridoxine 3,4'-cyclic phosphate which the same compound of formula (I) claimed by Applicant and is not an error (see abstract). The compound disclosed by Mineura et al. does not have RN 14141-47-0. Also, it should be noted that Mineura et al.'s compound has a Cas # (RN 36944-85-1) and was disclosed and well known or published

before applicant instant invention. That is, the Cas# (RN 36944-85-1) identifies the same compound as that claimed by Applicant.

The Applicant argues that as in *In re Yale*, Applicants respectfully submit that one of ordinary skill in the art upon reviewing the Mineura Abstract cited by the Office would mentally disregard or mentally substitute the erroneous chemical structure associated with the disclosure of "pyridoxine 4',5'- cyclic phosphate." However, the reference cited by Applicant is not the same as the reference cited by the Examiner. The reference cited by the Examiner is Mineura et al. (*Nippon Nogei Kagaku Kaishi* (1972), 46(3), 111-18) whereas the reference cited by Applicant is (Mineura et al. (*Nippon Nogei Kagaku Kaishi* 46(3):103-110, 1972), i.e., Part I. of Mineura's "Studies on the Production of Pyridoxal Phosphate" (see references cited). Moreover, the compound disclosed by Mineura et al. has the chemical structure for RN 36944-85-1, a pyridoxine 3,4'-cyclic phosphate which the same compound of formula (I) claimed by Applicant and is not an erroneous chemical structure associated with the disclosure (see abstract). The compound disclose by Mineura et al. does not have RN 14141-47-0. Also, it should be noted that Mineura et al.'s compound has a Cas # (RN 36944-85-1) and was disclosed and well known or published before applicant instant invention. That is, the Cas# (RN 36944-85-1) identifies the same compound as that claimed by Applicant.

The Applicant argues that in response, Applicants submit that claim 7 is not unpatentable over Mineura for at least the reasons set forth above in response to the rejection under 35 U.S.C. § 102. In particular, Applicants submit that Mineura fails to disclose a compound encompassed by the claimed subject matter. Accordingly, Applicants submit that Mineura fails to meet each and every limitation of the claimed subject matter. However, Mineura's compound is the same

as applicant's claimed compound. That is, Mineura et al. disclose applicant's compound represented by the general formula (I) wherein R<sup>1</sup> represents a cyclic phosphate group bound to R<sup>2</sup>; R<sup>2</sup> represents -CH<sub>2</sub>OH; and R<sup>3</sup> represents hydrogen atom (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be noted that applicant's compound is also named 4H-1, 3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract). Furthermore, it should be noted that structure of applicant's claimed compound of formula (I) is the same or identical as the structure of the Mineura et al.'s compound, regardless of what applicant claims is being studied by Mineura's (see abstract). That is, Mineura et al. disclose the same compound claimed by applicant.

The Applicant argues that, even if Mineura were to disclose a compound encompassed by Applicants' claimed subject matter, Mineura fails to disclose or suggest the advantageous effects of the claimed compounds and/or compositions, including the stability of the claimed subject matter and the ability of the claimed subject matter to stabilize compositions comprising Applicants' claimed compounds and one or more kinds of vitamins. In view of the unexpected, advantageous effects of Applicants' claimed compounds, and the lack of any disclosure of such advantageous effects with respect to the compounds disclosed in Mineura (which compounds are not even the same as those encompassed by Applicants' claimed subject matter), it would not have been obvious to one of ordinary skill in the art to prepare a composition comprising a combination of Mineura's compound and another vitamin. However as set forth in the above rejection, one having ordinary skill in the art would have been motivated, to prepare a composition comprising a combination of Mineura et al.'s compound and another vitamin which have the same utility in order to use it in a nutritive, a food stuff or a medicament. It should be

noted that it is obvious to determine the properties of the prepared composition or the components of the composition such as the stability of the components of the composition.

The Applicant argues that Applicants further submit that Mineura, which discloses a compound different from that encompassed by the claimed subject matter, fails to cure the deficiencies of FR 2349330. Applicants further submit that the cited art, either alone or in combination, fails to disclose an agent comprising arbutin. Thus, the cited documents in combination fail to meet each and every limitation of the claims, especially with respect to claim 10. However, Mineura's compound is the same as applicant's claimed compound. That is, Mineura et al. disclose applicant's compound represented by the general formula (I) wherein R<sup>1</sup> represents a cyclic phosphate group bound to R<sup>2</sup>; R<sup>2</sup> represents -CH<sub>2</sub>OH; and R<sup>3</sup> represents hydrogen atom (see abstract). Mineura et al.'s compound has a Cas # of 36944-85-1 (see abstract). It should be noted that applicant's compound is also named 4H-1, 3, 2-Dioxaphosphorino[4,5-c]pyridine-5-methanol, 2-hydroxy-8-methyl-, 2-oxide (see abstract). Furthermore, it should be noted that structure of applicant's claimed compound of formula (I) is the same or identical as the structure of the Mineura et al.'s compound, regardless of what applicant claims is being studied by Mineura's (see abstract). That is, Mineura et al. disclose the same compound claimed by applicant. Also, as set forth in the above rejection, one having ordinary skill in the art would have been motivated, to prepare a composition comprising a combination of a pyridoxine such as Mineura et al.'s pyridoxine compound and an antioxidant to treat hyperlipidaemia, since Savini Emile Constantin discloses that a pyridoxine and an antioxidant can be used. It should be noted that claim 10 is also encompassed by this rejection since it is obvious to use an antioxidant such as arbutin, since Savini Emile Constantin disclose

that a pyridoxine and an antioxidant can be used. Also, it should be noted that it is well settled that “intended use” of a composition or product, e.g., for a whitening agent, does not further limit claims drawn to a composition or product. See, e.g., *Ex parte Marsham*, 2 USPQ2d 1647 (1987) and *In re Hack* 114, USPQ 161.

The Applicant argues that Applicants further submit that one of ordinary skill in the art would not have been motivated to combine FR 2349330, which is directed to the treatment of lipidemia, with Mineura, which is silent with respect to any potential therapeutic properties of the disclosed compound and with respect to the advantageous effects of the claimed subject matter, e.g., whitening. However, one having ordinary skill in the art would have been motivated, to prepare a composition comprising a combination of a pyridoxine such as Mineura et al.’s pyridoxine compound and an antioxidant to treat hyperlipidaemia, since Savini Emile Constantin discloses that a pyridoxine and an antioxidant can be used. It should be noted that it is obvious to use an antioxidant such as arbutin, since Savini Emile Constantin disclose that a pyridoxine and an antioxidant can be used. Also, it should be noted that it is well settled that “intended use” of a composition or product, e.g., for a whitening agent, does not further limit claims drawn to a composition or product. See, e.g., *Ex parte Marsham*, 2 USPQ2d 1647 (1987) and *In re Hack* 114, USPQ 161.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Henry whose telephone number is 571-272-0652. The examiner can normally be reached on 8.30am-5pm; Mon-Fri. If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Shaojia A. Jiang can be

reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael C. Henry  
September 29, 2010.

/Shaojia Anna Jiang/  
Supervisory Patent Examiner  
Art Unit 1623

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/573,973	SAKAMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	MICHAEL C. HENRY	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 13 July 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3,5-7,9 and 10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 6 is/are allowed.  
 6) Claim(s) 1-3,5,7,9 and 10 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>07/13/10</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

